Enrollment and Application Forms for Industry

Version: 12-9-2013

Contents

Overview	
Determining Which Form to Submit	
Enrollment Form	
Application Form	
Attachment A: SEP Best Practice Scorecard for Industry: Application Worksheet	
Attachment B: Facility Certification Checklist	15

Overview

The Superior Energy Performance™ (SEP) program provides a transparent, globally recognized system that U.S. industrial facilities can use to improve their energy management and performance. SEP builds on the ISO 50001 framework for an energy management system (EnMS) and provides targets for improvements in energy performance.

Certification requires the use of the ISO 50001 energy management standard—which follows the Plan-Do-Check-Act approach used by other ISO management system standards (e.g., ISO 9001 and ISO 14001)—and the American National Standard, ANSI/MSE 50021, which specifies energy performance criteria and additional requirements for the energy management system.

To become certified, facilities must conform to ISO 50001 and ANSI/MSE 50021, improve energy performance, and undergo a SEP audit from an ANSI-ANAB accredited SEP Verification Body. SEP offers silver, gold, and platinum designations based on the level of energy performance improvement attained. SEP certification is valid for three years as long as annual audits are completed. To continue SEP certification beyond three years, facilities must apply for recertification.

Applicants to SEP need to indicate their proposed pathway on the application form. Some basic information on pathways is included below. Visit http://www.superiorenergyperformance.energy.gov/ for full details. Please note, the following options are not available at this time: 1) application for the SEP Partner (Self-Declaration) and 2) SEP certification upgrade for facilities already certified to ISO 50001.

Applicants may choose between the "Energy Performance Pathway" and the "Mature Energy Pathway."

- **Energy Performance Pathway**: This pathway requires demonstrated energy performance improvements over the three years after the baseline period.
- Mature Energy Pathway: Alternatively, applicants with longstanding energy management programs
 may meet the requirements by demonstrating they currently have in place energy management best
 practices and have achieved at least a 15% improvement in energy performance over the 10 years
 after the baseline period.

Pathway	SEP Performance Requirements	Level		
Patilway	SEP Performance Requirements	Silver	Gold	Platinum
Energy	Minimum % improvement	5%	10%	15%
Performance	Maximum years to achieve	3	3	3
Matura	Minimum % improvement	15%	15%	15%
Mature Energy	Maximum years to achieve	10	10	10
LIICIBA	Minimum Best Practice Scorecard points	35	61	81

The Mature Energy Pathway requires the use of the <u>SEP Industrial Facility Best Practice Scorecard</u> to meet SEP program performance levels. The scorecard assesses the maturity of a facility's energy management system and offers credits for energy management system activities, processes, or procedures that are "above and beyond" ISO 50001 requirements. The scorecard provides guidance and details about the credits.

Determining Which Form to Submit

ENROLL

A facility that enrolls in SEP gains access to resources to help streamline the SEP implementation process, such as program updates, tips, and phone support. By enrolling, your facility is among the leading industrial facilities working to gain proficiency in using an energy management system to achieve continual reductions in energy consumption and costs. Enrolled facilities can also make the SEP Administrator aware of any special circumstances that relate to your facility's SEP implementation. We recommend that you enroll as soon as you interested in SEP rather than waiting until you are ready to submit your application.

• **How to enroll**: Complete and submit the enrollment form on pages 4-6.

APPLY

A facility will submit an application to the SEP Administrator once the EnMS has been implemented, the energy performance improvement has been achieved, and the facility is prepared for the verification audit.

In the application form, applicants will provide information such as contact information, facility information, chosen SEP pathway, models, and any alternative approaches used. This information helps the SEP Administrator understand the basic approaches the facility has used and whether the applicant is requesting pre-approvals for any alternative approaches.

Once the SEP Administrator reviews and approves the application, applicants will be notified, after which, the SEP Administrator will provide the application package to the SEP Verification Body selected by the applicant.

If you wish to use any of the alternative approaches listed on the SEP Application for Industry page [http://www3.eere.energy.gov/manufacturing/superiorenergyperformance/application for industry.html], we strongly encourage you to submit your Request for Pre-Approval form(s) to the SEP Administrator *prior* to submitting your application, due to the amount of time necessary to review these requests. If you request pre-approval for alternate approaches at the same time as you submit your application, the application process could be delayed.

- How to apply: Complete and submit application form on pages 7-12.
 - For facilities that have already enrolled in SEP: If an enrollment form was already submitted for your facility, please review that form, update as necessary, and submit it with the application. If you do not have access to the enrollment form that was submitted for your facility, please request a copy from the SEP Administrator.
 - For facilities that have not enrolled in SEP: Please complete and submit the enrollment form (pages
 4-6) as part of this application.

Please submit the enrollment and application forms to the SEP Administrator via email: superiorenergyperformance@ee.doe.gov.

For questions, contact the SEP Administrator: superiorenergyperformance@ee.doe.gov.

Enrollment Form

Please submit the enrollment form to the SEP Administrator via email: superiorenergyperformance@ee.doe.gov. For questions, contact the SEP Administrator: superiorenergyperformance@ee.doe.gov.

Contact Information

1.	Please enter your contact information below.
	Company Name:
	Parent Company Name (if applicable):
	Facility Name:
	Street Address:
	Mailing Address: (if different than street address)
	City, State, Zip Code:
	Country:
	Contact Name:
	Contact Role: Corporate Energy Manager Plant Manager Facilities Manager Facilities Manager (plant, utilities, & facilities) Environmental Health & Safety Manager ISO Management System Expert Other: Contact Title: Phone Number: Email Address: If you are not the Plant Manager, please include his/her contact information below; they will be included in key communications: Contact Name: Contact Name:
	Phone Number:
	Email Address:
Fac	cility Information
	NAICS Code:
	ttp://www.census.gov/eos/www/naics/)
\ <u></u>	
3.	Does your facility have experience with ISO management systems?
	□Yes □No
4.	If yes, which ISO management systems? (Please select all that apply.)
	☐ISO 9001 ☐ISO 14001 ☐ISO 50001 ☐Other:

< \$500,000/Yr

www.superiorenergyperformance.energy.gov

5.	What ic	our facility	de actimated	total annua	l energy bill?
Э.	vviiat is	your racility	, s estimateu	total allitua	i energy bilir

Annual Total Energy Bill

		1 / /		
		\$500,000 to	\$1,000,000/Yr	
		\$1,000,001	to \$2,000,000/\	Yr
		\$2,000,001	to \$5,000,000/	Yr
		> \$5,000,000	0/Yr	
		Not sure		
6.	Does yo	ur facility h	ave a dedicate	d energy manager ¹ ?
	Y	'es	No	
	-		• •	that is a DOE Better Plants Program Partner? (Please select one.)
(Se	e <u>http://w</u>	vww1.eere.e	nergy.gov/mani	ufacturing/tech assistance/betterplants/ for more information.)
	Y	'es	□No	☐ Not sure
8.	If no, ar	e you intere	ested in receivi	ng information about Better Plants from DOE? (Please select one.)
		Yes	No	□ N/A
OP	TIONAL:			
Nο	te: Resnor	nding to the	auestions helow	v is optional, however the information provided below will help the SEP
	-	_	•	stage of enrollees in order to better provide useful resources. This information
			-	i stage of enfolices in order to better provide useral resources. This information
WII	not be sr	nared or dist	ributea.	
^	Nama	ffaaili		
9.	wame o	T your Tacili	ty's gas utility?	
10	Name a	£ £:1:		Pa. 2
10.	wame o	t your tacili	ty's electric util	lity?
11	Have		of the fallowin	
11.				g energy management resources in your energy management program
	·	-	Please select all	
			nergy Resource	
				v/manufacturing/tech_assistance/ecenter.html)
				agement guidelines and tools
		_	•	gic energy management technical assistance or rebates
		External ene	ergy consultant	
		Energy equi	pment supplier	r or service provider
		Other:		
12.	What fa	ctors motiv	ate your facilit	y's decision to pursue SEP? (Please select all that apply.)
	П	nergy cost	reduction	
				gy and sustainability practices
		Corporate re		by and sastaniability practices
		•	gas emission re	aduction
			dation of energ	
	=		uation of energ	y saving
		1thor		

 $^{^{\}rm 1}$ Facility staff that spends 50 percent or greater time on energy management.

www.superiorenergyperformance.energy.gov

 We will provide you with periodic informational emails. these emails, please list their names, email addresses, an 	
Name:	
Email:	
Role:	
Corporate Energy Manager	Facility Energy Manager
Facilities Manager (plant, utilities, & facilities)	Engineering Manager
Maintenance Manager	Environmental Health & Safety Manager
ISO Management System Representative	☐ ISO 50001 Management System Expert
Other:	
Name:	
Email:	
Role:	
Corporate Energy Manager	Facility Energy Manager
Facilities Manager (plant, utilities, & facilities)	Engineering Manager
Maintenance Manager	Environmental Health & Safety Manager
☐ ISO Management System Representative ☐ Other:	☐ ISO 50001 Management System Expert
Name:	
Email:	
Role:	
Corporate Energy Manager	Facility Energy Manager
Facilities Manager (plant, utilities, & facilities)	Engineering Manager
Maintenance Manager	Environmental Health & Safety Manager
ISO Management System Representative	ISO 50001 Management System Expert
Other:	
Name:	
Email:	
Role:	
Corporate Energy Manager	Facility Energy Manager
Facilities Manager (plant, utilities, & facilities)	Engineering Manager
Maintenance Manager	Environmental Health & Safety Manager
ISO Management System Representative	☐ ISO 50001 Management System Expert
Other:	

<END OF ENROLLMENT FORM>

Application Form

Facilities will submit this application form to the SEP Administrator once the EnMS has been implemented and the energy performance improvement has been achieved.

Please submit this form to the SEP Administrator via email: superiorenergyperformance@ee.doe.gov. For questions, contact the SEP Administrator: superiorenergyperformance@ee.doe.gov.

CONTACT INFORMATION

- o **For facilities that have already enrolled in SEP**: If an enrollment form was already submitted for your facility, please review that form, update as necessary, and submit it with this application. If you do not have access to that form, please request a copy from the SEP Administrator.
- o **For facilities that have not enrolled in SEP**: Please complete and submit the Superior Energy Performance Enrollment Form (see page 4) as part of this application.

BASIC FACILITY INFORMATION

Facility square footage:	
Sector:	
Information on site such as products or services produced as applicable:	
Number of employees ² :	
Number of shifts:	
Proposed scope for SEP and ISO 50001 certification:	
Scope exclusions:	

² The number of employees may not be the same as the number of effective personnel, which will be used by your chosen SEP Verification Body to determine the number of audit days.

www.superiorenergyperformance.energy.gov

PRIMARY ENERGY CONSUMPTION FOR THE FACILITY

Annual Total Primary Energy Consumption

Please check the appropriate category that indicates your annual total primary energy consumption in the table below:

Industrial Light	< 25,000 MMBTU/YR	
Industrial Medium	25,000 to 500,000 MMBTU/YR	
Industrial Heavy	> 500,000 MMBTU/YR	
Industrial Vany Haavy	> 500,000 MMBTU/YR (e.g. refineries,	
Industrial Very Heavy	complex chemical sites)	

Energy Sources

Please list your facility's energy sources and associated annual primary energy consumption (in MMBTU) for each source in the table below. (A <u>conversion table</u> is located in Section 3.7.2 of Superior Energy Performance Measurement and Verification Protocol for Industry.)

Additional instructions:

- Other energy sources: Add other energy sources in the lines near the bottom of the table.
- **Secondary energy sources**: Please <u>do not</u> list secondary energy sources (e.g., on-site generated steam) that are derived from primary sources.
- **Total**: The sum of items in this table should be listed in the "Total" line at the bottom of the table. The total should be in the same range as indicated in the "Annual Total Primary Energy Consumption" table above.

Energy Source	Annual Primary Energy Consumption MMBTU/YR
Purchased Electricity— Expressed by multiplying the delivered BTU by a source conversion factor of 3	
Natural Gas	
Coal	
Fuel Oil	
Diesel	
Bio-Fuel	
Propane	
Purchased Steam	
Purchased Compressed Air	
Purchased Chilled Water	
Purchased Hot Water	
Solar	
Wind	
Other:	
Other:	
Other:	
Total:	

FACILITY STATEMENT

the SEP web site.

	(name of facility and location) seeks to complete a:
	 SEP Certified Partner certification audit (Stage 1 and Stage 2) SEP Certified Partner recertification audit (Note: for the application to qualify as recertification, it must be submitted at least 6 months before the certificate expiration date.)
	Please note: The following options are not available at this time: 1) application for the SEP Partner (Self-Declaration) and 2) SEP certification upgrade for facilities already certified to ISO 50001.
Ple	ease answer the following questions.
1.	Is your facility is currently certified to any other ISO management system standard?
	a. Yes No
	b. If Yes, which ISO standard(s)?
	c. If Yes, please provide the scope of that certification:
	d. [Optional] If Yes, the certification body is:
2.	Please indicate which pathway your facility plans to use for certification. (Please select one.)
	☐ Energy Performance Pathway (go to question 3)
	☐ Mature Energy Pathway (Attach the Best Practice Scorecard Application Worksheet, Attachment A on Page 13, to indicate which credits are being claimed, and then skip to question 4)
3.	If Energy Performance Pathway was selected in question 2: What percentage energy performance improvement do you think your facility has achieved over the 3 years after the baseline period? (Please select one, and skip to question 5).
	☐ At least 5% but less than 10% ☐ At least 10% but less than 15% ☐ At least 15%
	☐ None of the above, however I have reviewed the criteria for selecting a shorter time period for the Energy Performance Pathway (see SEP Measurement and Verification Protocol for Industry, Section 3.5.2). Our facility meets the criteria listed and has achieved an energy performance improvement of at least 5% in the 1-2 years after the baseline period.
	Note: The final energy performance improvement achieved and verified by the verification body will be published on the SEP web site.
4.	If Mature Energy Pathway was selected in question 3: Has your facility achieved an energy performance improvement of 15% or greater over the 10 years after the baseline period? (Please select one.)
	☐ Yes ☐ No ☐ No, however I have reviewed the criteria for selecting a shorter time period for the Mature Energy Pathway (see SEP Measurement and Verification Protocol for Industry, Section 3.5.2). Our facility meets the criteria listed and has achieved an energy performance improvement of at least 15% over 5-9 years after the baseline period.
	Note: The final energy performance improvement achieved and verified by the verification body will be published on

www.superiorenergyperformance.energy.gov

5.	This question refers to the SEP Energy Performance Indicator (SEnPI), which is defined in the SEP Measurement and Verification Protocol for Industry, Section 3.1.2. In determining the SEnPI, select the method that the organization used: (Please select one.)
	☐ Ratio of energy consumption to single production level
	Note: Use of the "ratio of energy consumption to single production level" requires the ability to meaningfully represent all output in a single quantity, such as total tons or gallons per year. However, in most cases, the consumption depends on more than one production quantity and may also depend on additional factors including weather and non-production related energy consumption. In these cases, this approach would not be appropriate. Evidence must be provided to support the claim of only one relevant variable and that the ratio form is adequately predictive of energy performance.
	☐ Linear regression model ☐ Forecast ☐ Backcast ☐ Standard conditions ☐ SEnPI chaining
	 ☐ Complex regression model ☐ Polynomial model ☐ General nonlinear model ☐ Other model. Note: all other model options require review and approval by the SEP Administrator in advance of the Stage 1 audit. See the Measurement and Verification Protocol for Industry, Section 3.2.2.
	Note: Any rationale for using a complex regression model that differs from those listed in the SEP Measurement and Verification Protocol for Industry, Section 3.4.10 must be submitted to the SEP Administrator for pre-approval prior to or with the application. [See question 6]
que	Ilternative approaches that require pre-approval from the SEP Administrator are being used, please answer estion 6. Please see the SEP web site for more information on alternative approaches: tp://www3.eere.energy.gov/manufacturing/superiorenergyperformance/application_for_industry.html].
6.	All alternative approaches must be pre-approved by the SEP Administrator. Request for Pre-Approval Forms mentioned here can be requested from the SEP Administrator. (Please select all that apply.)
	☐ The organization proposes to use data reporting intervals that are more frequent than weekly. See the SEP Measurement and Verification Protocol for Industry, Section 3.4.2. [See Request for Pre-Approval Form 1]
	☐ The methodology and calculation for derived energy sources proposed is not listed in the SEP Measurement and Verification Protocol for Industry, Section 3.7.2. [See Request for Pre-Approval Form 2]
	Other rationale for using a complex regression model not listed in the SEP Measurement and Verification Protocol for Industry, Section 3.4.10. [See Request for Pre-Approval Form 3]
	☐ Alternative adjustment model application methodologies, under the conditions of Section 3.6.6 in the SEP Measurement and Verification Protocol for Industry. [See Request for Pre-Approval Form 4]
	☐ Justification of circumstances, where a model does not satisfy all the explicit model validity requirements specified in Sections 3.4.1 through 3.4.10 of the SEP Measurement and Verification Protocol for Industry. See the SEP Measurement and Verification Protocol for Industry, Section 3.4.11. [See Request for Pre-Approval Form 5]
	☐ Justification of non-routine adjustments, including calculations (Section 3.6.7 of the SEP Measurement and Verification Protocol for Industry). [See Request for Pre-Approval Form 6]

www.superiorenergyperformance.energy.gov

	Ver	Justification of other situations for adjustments not addressed explicitly in the SEP Measurement and ification Protocol for Industry, including calculations (Section 3.8.3 of the SEP Measurement and ification Protocol for Industry). [See Request for Pre-Approval Form 7]
	app	e: Applicants are strongly encouraged to submit their Request for Pre-Approval Form(s) prior to submitting the dication to avoid delays in the application process; however these forms are also accepted when the application ubmitted.
7.	Did you	use the optional EnPI Tool to determine the SEnPI?
	a.	☐ Yes ☐ No
	b.	If Yes, does the EnPI Tool use an Excel add-in?
_		☐ Yes ☐ No
8.	-	ou used consulting services to assist in determining the SEnPI? Yes No
	a.	-
	b.	If Yes, Please provide details about the specific consulting service(s):
9.	-	our facility have any outsourced processes affecting energy use and consumption that are within the cope and boundaries?
	a.	☐ Yes ☐ No
	b.	If Yes, what are these outsourced processes?
10.	[<u>http://</u> a.	bu selected a SEP Verification Body? Visit the SEP web site for a list of approved Verification Bodies: www3.eere.energy.gov/manufacturing/superiorenergyperformance/verification_bodies.html] Yes
	c.	If No, please select a SEP Verification Body and notify the SEP Administrator as soon as possible.
If y	ou are n	ot seeking recertification, skip to question 12.
11.	If this is	an application for recertification, please answer the following questions.
	a.	What is your current certificate number?
	b.	When was your initial certification date?
	c.	When was your most recent surveillance audit?
	d.	Who is your SEP Verification Body?
	e.	Are there changes to the certification scope for your facility? (Note: This will require a Stage 1 audit for recertification)
		☐ Yes ☐ No
	f.	Are you using a different type of model to determine the SEP Energy Performance Indicator (SEnPI)? (Note: This may require a Stage 1 audit for recertification)
		☐ Yes ☐ No

www.superiorenergyperformance.energy.gov

	g.	•		•	way for certifi		n your facil	ty's last ce	ertification	audit?
		☐ Yes		□No						
12. Sı	ırveil	lance and Cer	tification	Renewal Re	equirements					
m	ainta	nowledge tha ined and conti ied effectivend	inual impr	rovement o	f energy perfo	rmance is	supported.	These aud	dits will ass	sess the
		o acknowledge by the Verifica			n is valid for th	nree years	following t	he date th	at my SEP	certificate is
		dividual submi								_
										_
Phone	Num	nber:								
		ess:								
Date:										
Name	of in	dividual autho	rizing this	application	n:					
Title: _						_				
										_
Phone	Num	ıber:								
Email	Addr	ess:								
Date:										

<END OF APPLICATION FORM>

Attachment A: SEP Best Practice Scorecard for Industry: Application Worksheet

If the industrial facility has selected the Mature Energy Pathway, please attach this worksheet to the SEP application to indicate which credits are being claimed.

Energy Data, Monitoring and Measurement (DM)							
	DM Credit 1.1: Data availability						
	DM Credit 1.2: Improve data collection and analysis						
	DM Credit 2.1: EnPI updating						
	DM Credit 2.2: Establish benchmarks						
	DM Credit 3.1: Submeters						
	DM Credit 3.2: Cost centers						
Sign	Significant Energy Uses (SU)						
	SU Credit 1: Facility energy balance						
	SU Credit 2: Designation of significant energy uses						
	SU Credit 3.1: Equipment repair and replacement policy						
	SU Credit 3.2: Utilize energy efficient design						
	SU Credit 4.1: Energy efficient maintenance practices						
	SU Credit 4.2: EnPIs for significant energy uses						
Enei	gy Supply (ES)						
	ES Credit 1.1: Include procurement personnel on energy team						
	ES Credit 1.2: Demand optimization						
Mar	Management of Energy Projects (EP)						
	EP Credit 1.1: Regular assessment of significant uses						
	EP Credit 1.2: Energy system assessment standards						
	EP Credit 1.3: Continual improvement tools						
	EP Credit 1.4: Life cycle costing						
	EP Credit 2: Lower financial barriers						
Syst	System Sustainability (SS)						
	SS Credit 1.1: Resources: Energy management team						
	SS Credit 1.2: Awards or incentive program for energy						
	SS Credit 1.3: Energy professional certifications						

www.superiorenergyperformance.energy.gov

	SS Credit 1.4: Strategic planning					
	SS Credit 2: Preventive action					
	SS Credit 3: Management review of inputs from stakeholders					
Ene	Energy Performance Improvement Credits					
	Energy Performance Improvement Credit					
Inno	Innovation Credits for Energy Performance					
	Innovation Credit 1: Combined Heat and Power					
	Innovation Credit 2: Renewable Energy Supply					
	Innovation Credit 3: Superior Performance with Benchmarks					
	innovation credit 3. Superior Ferrormance with Benchmarks					
	Innovation Credit 4: Other Innovative Actions Note: This credit has been suspended and is unable to be submitted at this time.					

Attachment B: Facility Certification Checklist

This checklist has been prepared as an informal guide for facilities applying to the SEP certification program. Use of this checklist is not required.

Certified Partner: ANSI-ANAB Accredited Certification Checklist
☐ Have you contacted the SEP Administrator and enrolled in SEP?
☐ Have you contacted the SEP Administrator and received pre-approval(s) for any alternative approach(es) used?
☐ Have you contacted the SEP Administrator and submitted an application to be a SEP Certified Partner?
☐ Have you selected a SEP Verification Body that is ANSI-ANAB accredited to conduct the SEP conformity audit and recognized by the SEP Administrator
[http://www3.eere.energy.gov/manufacturing/superiorenergyperformance/verification_bodies.html]?
☐ Has the selected SEP Verification Body conducted a SEP conformity audit, which includes a Stage 1 audit to confirm whether the facility is prepared for the Stage 2 audit?
☐ Has the selected SEP Verification Body sent a SEP Lead Auditor and SEP Performance Verifier(s) to the facility to perform a Stage 2 audit assessing the following?
☐ Conformance to ISO 50001 and ANSI/MSE 50021
☐ Energy performance improvement verified using the appropriate sector-specific SEP Measurement and Verification Protocol
☐ Has the SEP Verification Body informed the SEP Administrator whether the facility has met the requirements for certification to ISO 50001 and ANSI/MSE 50021 including the specified energy performance improvement and whether a certificate will be issued to the SEP Certified Partner applicant?
☐ Has the SEP Administrator posted the results of the certification decision on the SEP web site?